

AFCEA SOLUTIONS 2008

Information Sharing

13•MAR•08

Transforming to a Services-Oriented Enterprise

LTG Jeff Sorenson

Chief Information Officer/G-6

AMERICA'S ARMY: STRENGTH OF THE NATION
ARMY STRONG





Agenda



Persistent Conflict



Enterprise Challenge



Enterprise Complexities



Enabling Transformation



Conclusions





Era of Persistent Conflict



Protracted confrontation . . . fueled by six important trends



A Soldier's Story



OPERATIONAL IT/DATA REQUIREMENTS:

NETWORK – constantly changing

E-MAIL ADDRESS – constantly changing/multiple

TELEPHONE NUMBER – constantly changing/multiple

COLLABORATION TOOLS – constantly changing

FILE STORAGE SYSTEM – constantly changing



Garrison

 808-555-2020

 **AKO** **ARMY**
KNOWLEDGE
ONLINE

AKO-S

(NIPR/SIPR)



 Chat



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Garrison



808-555-2020



AKO-S

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Chat



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Training

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(SIPR/NIPR)



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Power Projection



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Deployed










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A Soldier's Story

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Ideal End-State

Universal E-Mail Address

Universal File Storage

One Telephone Number

Standard Collaboration

Tool Set



Deployed



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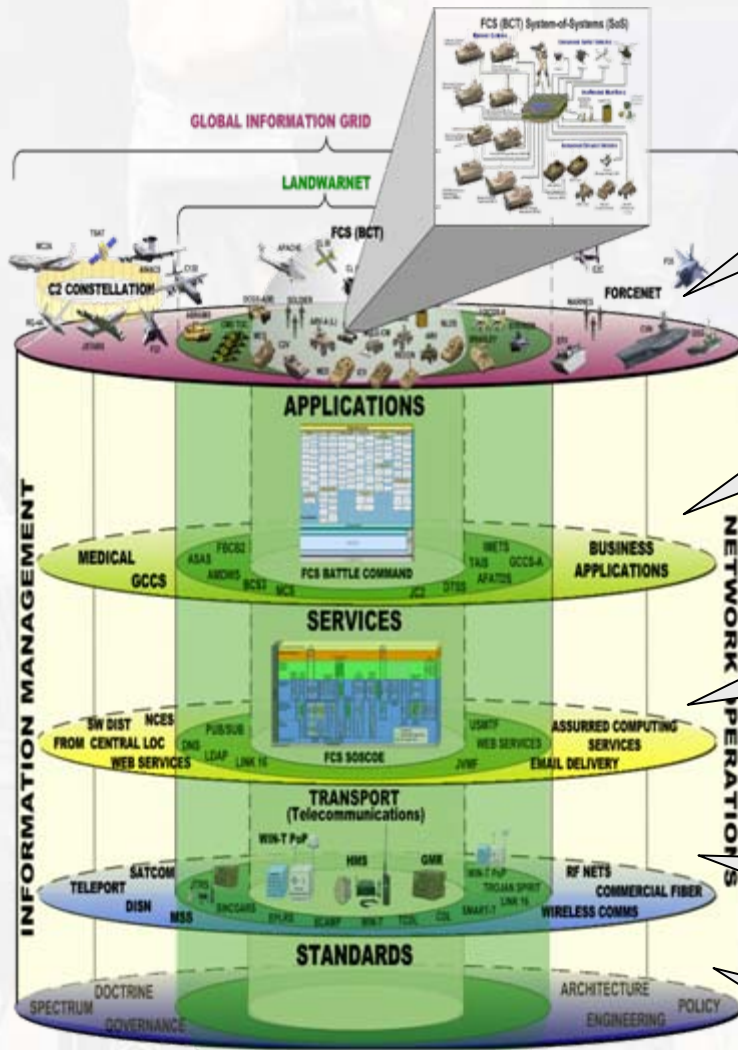


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Requirements Complexity



Platforms & Sensors:

C2V Platforms, MULE, ARV, Sensors, UAVs, DCGS, M1 Abrams, Apache, EFV, Cobras, AWACS, JSTARS, Space Radar, CVN, DDG, SSN

Applications:

Army Battle Command Systems (ABCS), FCS-BC, Net Enabled Command Capability (NECC), DCAS, GCCS, GCCS-A, ASAS, GCSS, FBCB2

Services:

SA, ISR, Collaboration, SOSCOE, Net-Centric Enterprise Services (NCES), Army Knowledge Online (AKO), Defense Knowledge Online (DKO)

Transport:

GIG Backbone, I3MP Backbone, APC, RHN, NSC, Trojan Spirit, JNN, SWAN, WIN-T, DSCS, WGS, MUOS, TSAT, STEP, Teleport, JTRS, SINCGARS

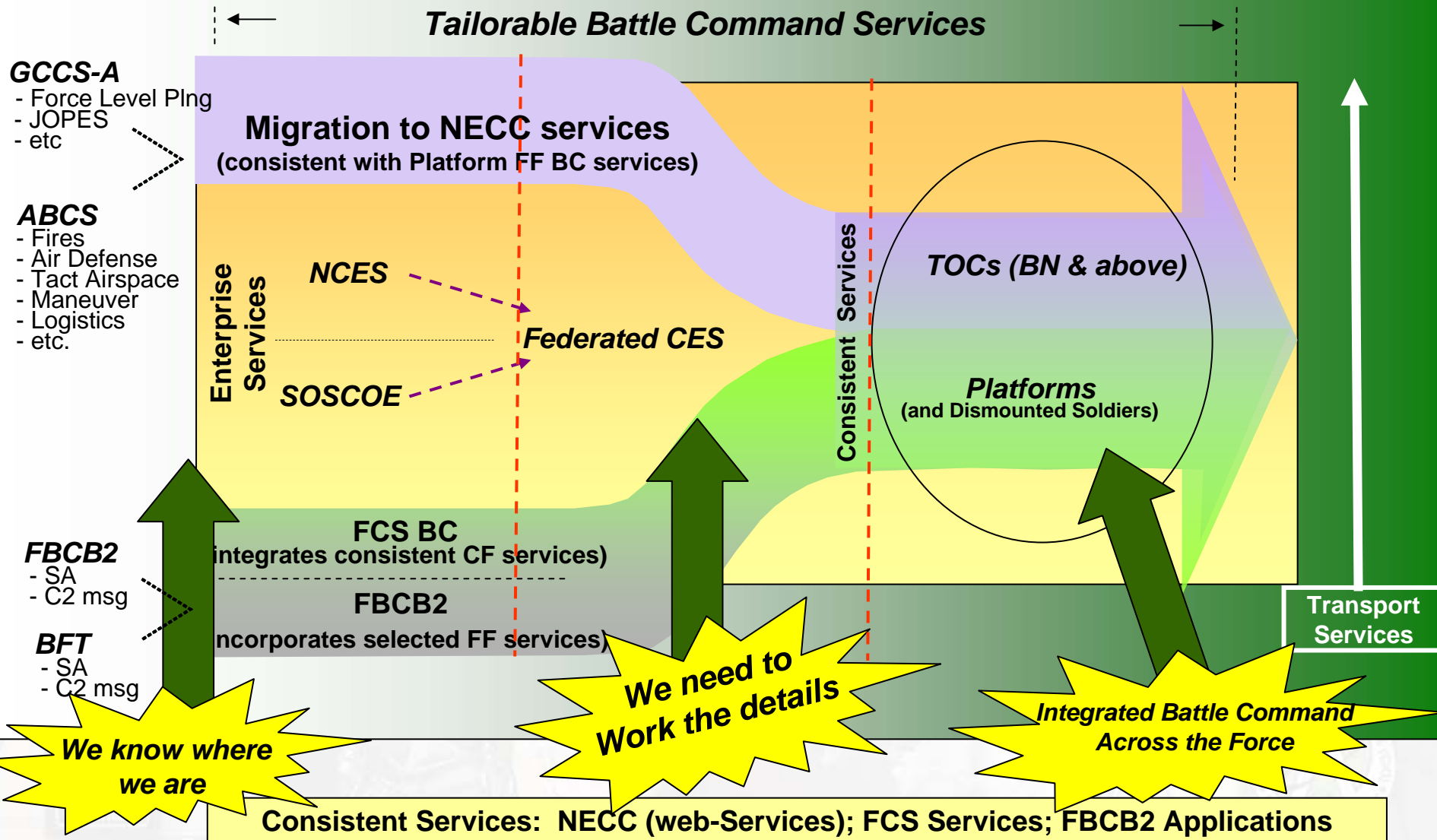
Standards:

IPv6/IPv4, SOA, XML, WSDL, XMPP, SOAP, UDDI, RDF, NIST, SAML, OASIS, WNW, CDL, IEEE



Unified Battle Command Complexity

... Consistent services supporting alternative Network environments





C4/IT Funding Complexity

...Across 6 PEGs (FY 2009 Budget)



Organizing PEG: \$449M

- Army Knowledge Online (AKO)
- Network Information Services Agency-Pentagon (NISA-P)

Sustaining PEG: \$217M

- Global Combat Service Support- Army (GCSS-A)
- Deployment Automation

Equipping PEG: \$6.0B

- MILSATCOM
- Warfighter Information Network- Tactical (WIN-T)
- Joint Tactical Radio System (JTRS)
- Force 21 Battle Command Brigade & Below (FBCB2)
- Army Battlefield Command System (ABCS)

Training PEG: \$640M

- Distance Learning
- NETCOM

Manning PEG: \$375M

- Army Recruiter Information System (ARIS)
- HRC Automation
- MEPCOM Automation

Installation PEG: \$2.25B

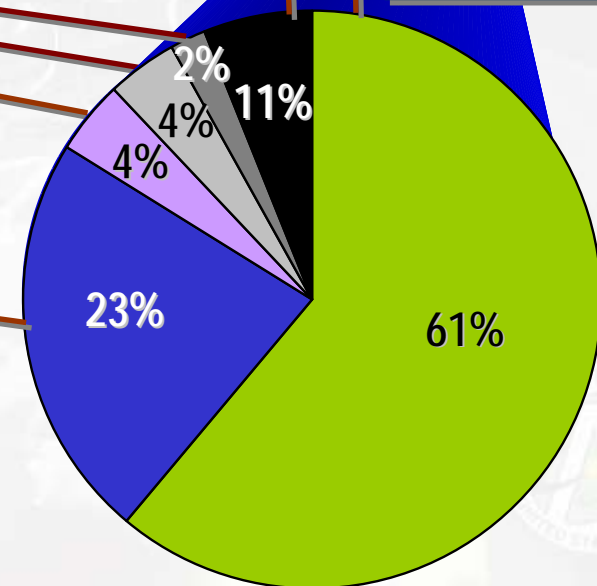
- Installation Information Infrastructure Modernization Plan (I3MP)
- Reserve Component Automation System (RCAS)
- Long Haul (NIPR, SIPR & DSN)
- Base Support
- Information Assurance (IA)

Total Army Funding

\$139B

C4/IT Funding

- \$9.97B
- 7.2% of Army TOA





Enabling Transformation

Capability-driven Architecture and Analysis



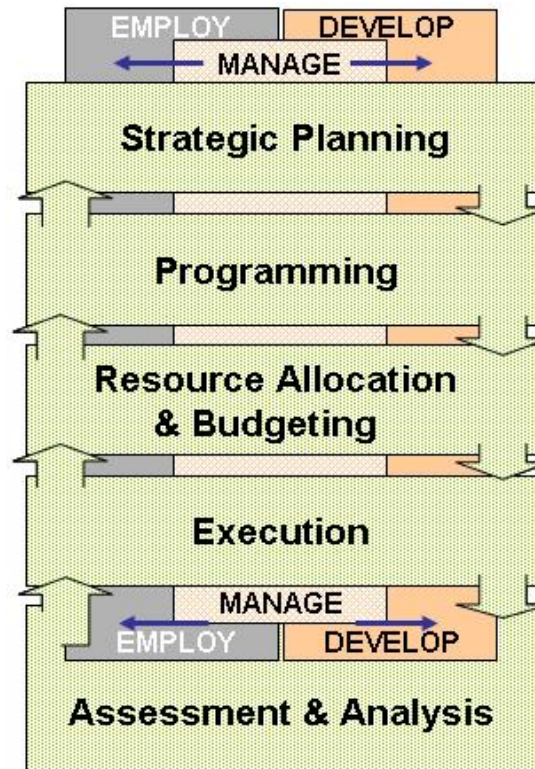
Collaboration Strategy

Capability/Mission Context

Programmed Service
Solutions

Federated SOE Roadmap

Enhancing Analysis for Transforming to a Services-Oriented Enterprise



Net-Centric Data Strategy

Federated Governance Model

Harmonization & Integration

Enterprise CIO Support

Shared Situational Analysis

Analytical Support for all
Stakeholders

Govern our Transformation
to a SOE

Semantic Strategy

Cross-domain Alignment

New Collaboration Paradigm

Support Analysis Needs



Collaborating on the Details

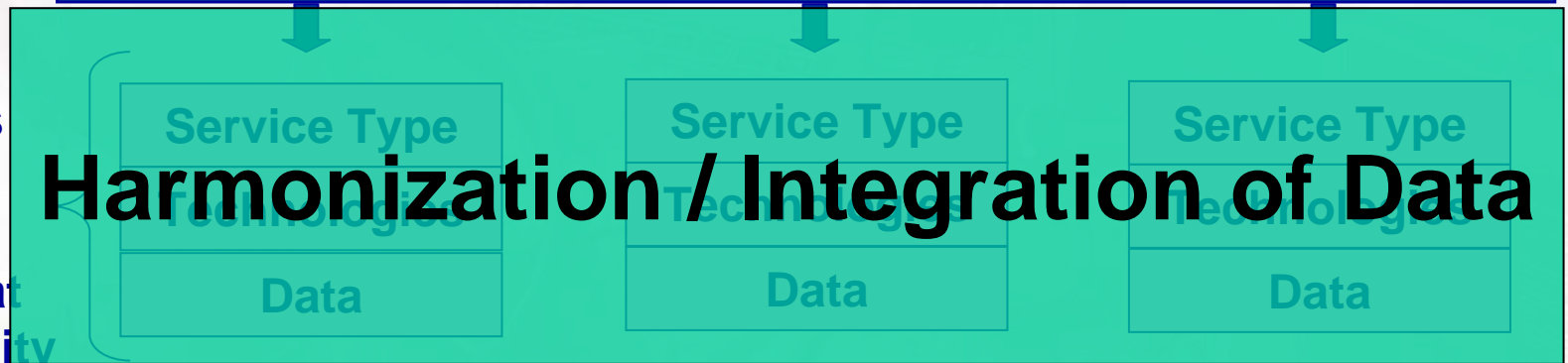


Step 1
Mission
stakeholders
w/capability
needs define
context

Goals	Goals
Customer/Stakeholder Context	Customer/Stakeholder Context
Line of Business (JCAs, UJTLs)	Line of Business (JCAs, UJTLs)
Performance Targets (MOE/MOP)	Performance Targets (MOE/MOP)

Capability - to - Service

Step 2
Program
stakeholders
describe
service
solutions that
fulfill capability



Step 3:
All stakeholders
plan transition
to target service
architecture

Current Programmed Solutions - to - SOE Roadmap

Service Type	Technologies	Data
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Net-Centric Data Strategy

COMPLEXITY

Critical Success Factors!



GOVERNANCE

- Data Czar and Chief Data Officers
- Army Data WG – July 07
- CIO/G6 Published Data Strategy Guidance – Nov. 07
- Data Management Maturity Assessment Process – *On going*

MITIGATION

- Established Data Center of Excellence
- Developed Army Data Reference Model and Data Reference Architecture
- Identification of Authoritative Army Data Sources – *On going*

Harmonization/Integration of Data

- Communities of Interest
- Information Exchange Standard Development Guidance
- Data Validation Guidance/Process
- Leveraging SOA Data Services principles



Common Semantics (Meaning)



aligns and enables
diverse community
language

Ontology

rather than requiring a
single set of terms

AMC Equipment Types (10)

Tracks
Wheels
Trailers
MHE
Weapons
NVDs
Communications
NBC
Aircraft
Generators

G3 Warfighting Functions (6)

Intelligence
Movement & Maneuver
Fire Support
Protection
Sustainment
Command & Control

G8/G4 Equipping Capability (14)

Air Defense
Aviation
Battle Command
C3 Capabilities
Force Protection
Intel
Log Auto
Maneuver
Medical
Mobility
QM/OD
Soldier
Strike
Transportation

ASA(ALT) ERC Categories (7)

Aviation
Communicate
Force Protection
Move
Shoot
Strike
Sustain

**Collaborative Ontology
Development**

Shared Situational Awareness

The screenshot shows the BCKS website interface. At the top left is the U.S. Army logo and the BCKS logo. Below the logo is a welcome message for MARTY LENER'S (CAC Session) and links for My Account, Create a Site, Help, and Logout. To the right of the header are icons for Email, Files, Forums, Groups, IM/Chat, My Forms, and White Pages. Below the header is a navigation bar with links for Home, My Workspace, Site Map, My Favorites, Quick Links, and Self Service. A search bar is located on the right side of the navigation bar. Below the navigation bar is a breadcrumb trail: AKO Home > BCKS > Battle Command Knowledge System. Below the breadcrumb trail is a link to view related content. The main content area features the title "BATTLE COMMAND KNOWLEDGE SYSTEM" in large, bold letters. Below the title is a row of buttons: Home Page, BookMark BCKS, BCKS Forums, Files: WKB, Last Discussions, and KM Training. Below these buttons is a row of buttons: Hot Links, Contacts, Search restricted, and Mission & Obj. Below the buttons is a quote: "Share What You Know, Find What You Need." Below the quote is a section titled "Soldiers In Action" with a link to access the web site in a separate browser window. Below the link is a photograph of a tank in a desert environment. To the right of the photograph is a section titled "BCKS Hot Topics" with a link to a new FM 6-22 Available Now. Below the link is a paragraph about the Field Manual 6-22 Army Leadership and the associated Training Support Package. To the right of the main content area is a sidebar with sections: About BCKS, Joint Public Affairs Guidance, and The Foundations of Army Knowledge Management. The About BCKS section contains links to BCKS Mission & Objectives, BCKS Video Introduction, Contact Web Team, Download a BCKS Flyer, and Report Broken Link. The Joint Public Affairs Guidance section contains a paragraph about a weekly (FOUO) publication of the U.S. Embassy and Multi-National Force-Iraq to synchronize messages and alert primary USG communicators of key themes and talking points. The Foundations of Army Knowledge Management section contains a paragraph about viewing videos to learn about the Foundations of Army Knowledge Management.

BCKS
U.S. ARMY BATTLE COMMAND KNOWLEDGE SYSTEM
Welcome, MARTY LENER'S (CAC Session)
My Account | Create a Site | Help | Logout

Email Files Forums Groups IM/Chat My Forms White Pages

Home My Workspace Site Map My Favorites Quick Links Self Service

Search for . . . All of AKO SEARCH

AKO Home > BCKS > Battle Command Knowledge System

Battle Command Knowledge System (view related content)

Group Profile Send Feedback Send AKO Link

BATTLE COMMAND KNOWLEDGE SYSTEM

Home Page BookMark BCKS BCKS Forums Files: WKB Last Discussions KM Training
Hot Links Contacts Search restricted Mission & Obj.

"Share What You Know, Find What You Need."

Soldiers In Action
[Click here](#) to access this web site in a separate browser window.

BCKS Hot Topics
New FM 6-22 Available Now:
[Field Manual 6-22 Army Leadership](#) and the associated [Training Support Package](#) detail the fundamental principles of which Army leaders act to accomplish their mission and how to care for their people.

About BCKS
[BCKS Mission & Objectives](#)
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Joint Public Affairs Guidance
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[JPAG November 6 - 12, 2006](#)
[JPAG Oct 30 - Nov 5, 2006](#)

The Foundations of Army Knowledge Management
View these videos to learn about the Foundations of Army Knowledge Management

<https://bcks.army.mil>

AKO User Name
&
AKO Password

*Log On and Share your ideas and
opinions with Fellow Soldiers*



How We Can Make It Better



❖ Requirements

- ◆ System-of-System Architecture
- ◆ Service-Oriented Architecture
- ◆ Battle Command Convergence Strategy
- ◆ Net-Centric Data Strategy

❖ Acquisition → PEO Networks

- ◆ PEO C3T
- ◆ PEO EIS
- ◆ FCS Battle Command

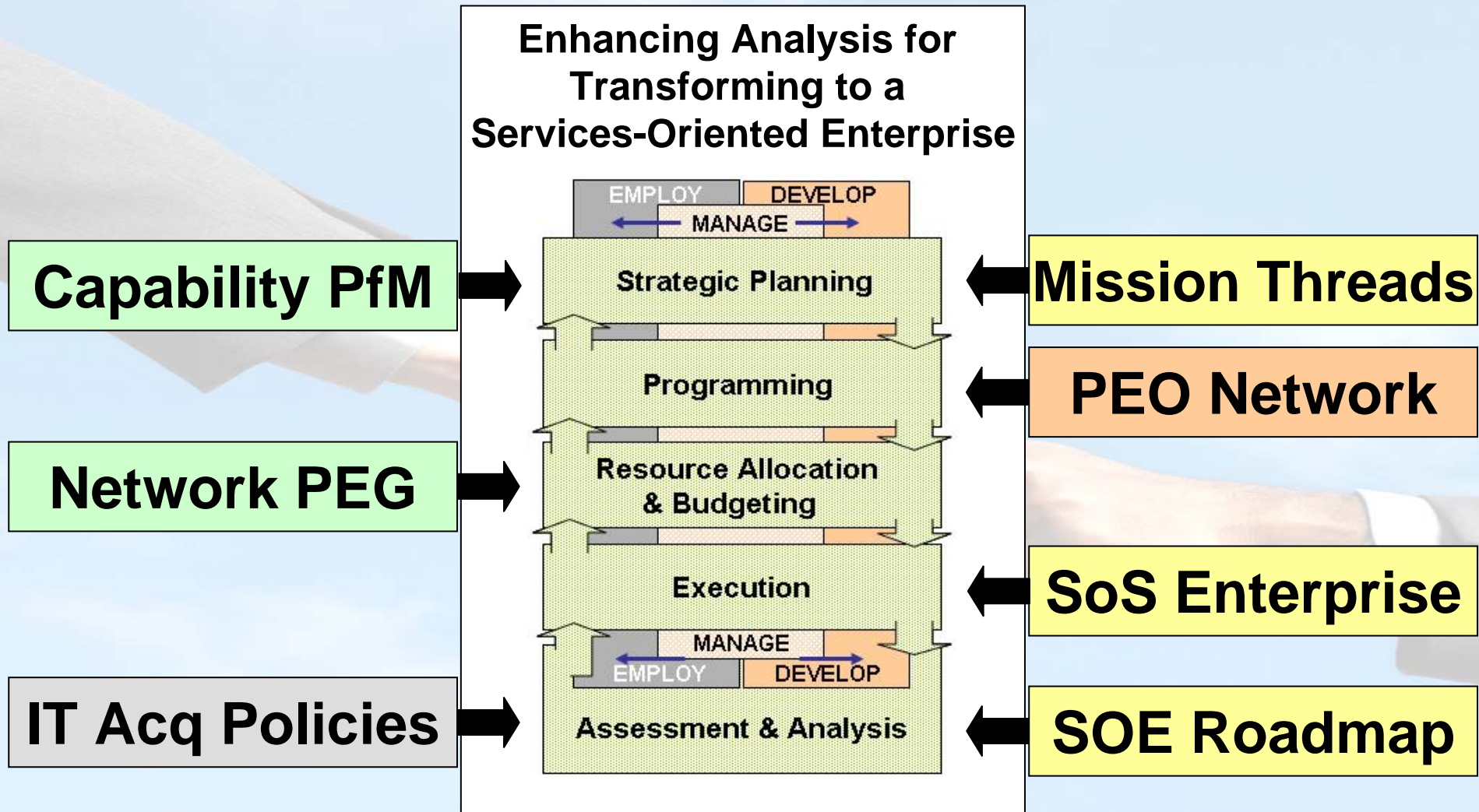
❖ Resources → Network PEG

❖ Policy → Acquiring IT – “Not like a tank”





Enabling a Services-Oriented Enterprise





Conclusions!!!



Posturing for Persistent Conflict

...driving an Expeditionary Army



Operational IT/Data Requirements

...Visible, Accessible, and Understandable



Enabling a Services-Oriented Enterprise

...Requirements, Acquisition, Resources & Policy



Shared Situational Awareness

...Bottom Line to Joint Warfighter



QUESTIONS • THOUGHTS

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